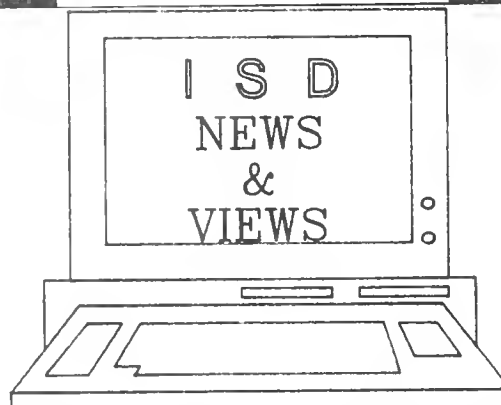


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VOL.5 NO. 6

A PUBLICATION OF THE INFORMATION CENTER BUREAU  
MONTANA DEPARTMENT OF ADMINISTRATION  
INFORMATION SERVICES DIVISION

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## News



### FREELANCE PLUS Selected For Support

After evaluating several PC Graphics packages, the Information Center recommends FREELANCE PLUS. Support by the Information Center means that training and technical assistance will be available. FREELANCE PLUS was selected primarily for these reasons:

1. Ease of use. FREELANCE PLUS uses a menu structure similar to Lotus 1-2-3. Since many of our users will be generating data for graphs using 1-2-3, this will mean less training is necessary.
2. FREELANCE PLUS can easily import data from 1-2-3, Symphony or dBase to create graphs. One may also import 1-2-3 and Symphony graphs into FREELANCE PLUS and enhance them with freeform graphics or symbols from the extensive symbol library.
3. FREELANCE PLUS is a product of the Lotus Corporation. With our commitment to 1-2-3, it makes sense to use a companion graphics package supported by the same company.

Classes are tentatively scheduled for June 17 & 18. For a complete report on the evaluation of FREELANCE PLUS or to see sample graphs, see Gary Wulf in the Information Center or call 444-2555.

### Mainframe Term Contract Changes

IBM has withdrawn the 3179 and the 3180 terminals from the term contract. They have replaced both models with the IBM 3192-C for \$1440.00 and the IBM 3192-D for \$1364.00. For more information on these terminals, call Mary Olson at 444-2861.

### Microcomputer Term Contract Price Decrease

Data Northwest has decreased the price of the following term contract items:

- Leading Edge PC Model D/H                      \$1668.85  
  with a 30 megabyte hard disk
- Leading Edge PC Model D/H                      \$1597.85  
  with a 20 megabyte hard disk

## Term Contract Deadline

The deadline for purchasing term contract items with FY87 funds is June 15, 1987. Please send purchase orders and justifications to Mary Olson by June 15, 1987.

## Term Contract Freight

Term contract prices do not include freight. Actual freight charges will be added to the price. Contact the vendor for estimates.

## dBASE USER GROUP

The dBASE user group meets the first Tuesday of each month at 8:30 in the State Library conference room. All dBASE users are welcome to attend. For more information, call Bob LaRue at 444-5408 or Gregg Wheeler at 444-3064.

## Mailing List Update

Once again, it is time to update the ISD mailing list. Please check the label on the front of the newsletter. If it is not correct, please correct it and send the front cover back to the Information Center. If you do not want to tear the newsletter apart, please send us a note with the correct information noting whether you want the newsletter sent by mail, deadhead, or left in your box. Also, please check to see if newsletters are coming to your office for people who no longer work there or no longer wish to receive their own copy of News and Views. Please write the word "delete" on the front cover and send the front cover to the Information Center, Mitchell Bldg, Rm 24, Helena, MT 59620. Thanks for your consideration.

## IBM announces new 3270 Emulation packages

The IBM PC 3270 Emulation Program Entry Level version 1.0 has been withdrawn from market. It has been replaced with the IBM 3270 Emulation Program Entry Level version 1.1. The new features in version 1.1 include:

- Entry Emulator High-Level Language Application Program Interface providing a high-level language program interface. This allows PC Programs written in IBM BASIC, Pascal, C, and COBOL to interface with the 3270 emulation Entry Level 1.1 program to emulate the actions of the terminal operator.
- Program Function Keys 13-24 supported.
- A Patch utility is provided to make changes to the code or data.

An upgrade option is available to upgrade from version 1.0 to 1.1 for \$75. These must be postmarked on or before November 16, 1987. Forms to upgrade to the new version are available from the Information Center Bureau. Questions concerning the upgrade may be directed to Ron Heilman at 444-2924.

The IBM PC 3270 Emulation Control Program version 2.0 has been withdrawn from market. It has been replaced with the IBM 3270 Emulation Control Program 3.0. The new features in release 3.0 include:

- IBM Token-Ring Attachment
- Direct attachment to IBM 3275 via Token-Ring Network, with no intervening gateway station.
- Configuration as a standalone or gateway
- Additional connectivity
- Distributed Functional Terminal (DFT) attachment (using the IBM 3278/79 Emulation Adapter) to an appropriately configured IBM 3274 Control Unit with BSC.

Upgrade options are available to upgrade from IBM 3270 Emulation Program Entry Level for \$240, the IBM PC Network SNA 3270 Emulation Program for \$75, and the IBM PC 3270 Emulation Program version 2.0 for \$75. These must be postmarked on or before July 31, 1987. Forms to upgrade to the new version are available from the Information Center Bureau. Questions concerning the upgrade may be directed to Ron Heilman at 444-2924.

#### IDMS/R Technical Tip

An article written by Mike Zarndt, of the Database Design and Administration Section, was recently published in Boxes and Arrows, a nationally distributed newsletter to users of Cullinet's IDMS/R database management system. Boxes and Arrows circulation is reaching over 40% of the 15,000 sites using IDMS/R, so Mike's contribution benefited a significant reader base.

Mike's article dealt with the use of the ADS/O programming language that is included with our IDMS/R database management system. The IDMS/R software includes a DEBUG facility which is intended to assist the programmer in the testing of ADS/O programs. Problems can occur after load module migration of programs using the DEBUG facility in which the IDMS/R system executed the "wrong" program.

Mike developed a method to prevent the IDMS/R software from referencing the ADS/O module that has been debugged using the DEBUG facility instead of the most current module that is intended to be used in production.

For the benefit of our IDMS users, the article has been distributed to everyone receiving the database bulletins. If you would like a copy, call the Systems Development Bureau at 444-3987.

#### **DISOSS (Electronic Mail) User Group**

A DISOSS User Group meeting is scheduled for Tuesday, April 28, 1987 in the Training Center (Room 25) of the Mitchell Building at 1:30 p.m.

A demonstration of the new release of Personal Services/PC (version 1.2) will be on the agenda. Some of the enhancements expected to be covered are:

- o access to the Host Text Library, allowing you to store, search, retrieve, send, and delete documents from a library on the host
- o ability to delete both documents and messages from your file cabinet with one command
- o when receiving a document, the pc file name will be the same as the senders pc file name (if you have a document by that name already on disk, the date stamp will be used)

We are also tentatively planning on covering the new enhancements of Personal Manager. Any ideas you have or subjects you would like to see covered during the user group, please call Jeanette at 444-2858. All interested persons are invited to attend. A reminder message about the User Group meeting will be sent out on DISOSS approximately one week before the meeting.

#### **Personal Services Maintenance Release**

IBM has already published a maintenance upgrade for Personal Service Version 1.2. This upgrade contains changes to four files in Personal Services. It is available free of charge from the Information Center.

We will provide this upgrade similar to the WordPerfect 4.2 upgrade. Bring a formatted diskette to the Information Center and we will copy the four files to your diskette. We will also provide instructions explaining which directories these files should be copied to on your machine. Questions can be directed toward Text Processing at 444-2858.

Current list of Electronic Mail (DISOSS) users.

<u>Dept/Division</u>	<u>User ID</u>	<u>Address</u>	<u>User Name</u>	<u>Word Processing</u>
Admin/Accounting	ADACAD01	DSVHOST	Kathy Fabiano	WordPerfect
Admin/Arch&Engr.	ADAEAD01	DSVHOST	Tom O'Connell	Displaywrite3
" "	ADAEAD02	DSVHOST	Jean Christofferson	Displaywrite3
Admin/Central Serv	ADCSBA01	DSVHOST	Karen Munro	WordPerfect
" "	ADCSBA02	DSVHOST	Earl Zuelke	WordPerfect
" "	ADCSP001	DSVHOST	Jim Nys	WordPerfect
Admin/Director	ADDODR01	DSVHOST	Ellen Feaver	Displaywrite3
" "	ADDODR02	DSVHOST	Dave Ashley	Displaywrite3
" "	ADDODR04	DSVHOST	Marv Eicholtz	Displaywrite3
" "	ADDODR05	DSVHOST	Nan LeFebvre	Displaywriter
Admin/General Serv	ADGSAD01	DSVHOST	Deane Blanton	Displaywrite3
" "	ADGSAD02	DSVHOST	Sue Campbell	Displaywrite3
Admin/Info Serv	ADISAD01	DSVHOST	Mike Trevor	WordPerfect
" "	ADISAD02	DSVHOST	Sharon Gosnell	WordPerfect
" "	ADISAD03	DSVHOST	Jim Christnacht	WordPerfect
" "	ADISAD04	DSVHOST	Linda Cuchine	WordPerfect
Admin/Info Serv/ICB	ADISIC01	DSVHOST	Dave Marshall	WordPerfect
" "	ADISIC02	DSVHOST	Pat Emineth	Displaywrite3
" "	ADISIC03	DSVHOST	Randy Holm	WordPerfect
" "	ADISIC04	DSVHOST	Ron Heilman	WordPerfect
" "	ADISIC08	DSVHOST	Teri Lundberg	WordPerfect
" "	ADISIC09	DSVHOST	Jeanette Rushford	WP and DW3
" "	ADISIC10	DSVHOST	Mel Liston	WP and DW3
" "	ADISIC11	DSVHOST	Sandi Coyle	WP and DW3
" "	ADISIC12	DSVHOST	Brett McAlister	WordPerfect
" "	ADISIC90	DSVHOST	Text Unit	WP and DW3
Admin/Info Serv/Oper	ADISOP01	DSVHOST	Paul Rylander	WordPerfect
Admin/Info Serv/RMU	ADISRM01	DSVHOST	Amy Palmer	WordPerfect
" "	ADISRM02	DSVHOST	Mary Olson	WordPerfect
" "	ADISRM03	DSVHOST	Al Tompkins	WordPerfect
Admin/Info Serv/SDB	ADISSD01	DSVHOST	Jeff Brandt	WordPerfect
" "	ADISSD90	DSVHOST	Lois Lebahn	WordPerfect
" "	ADISSD02	DSVHOST	Sharon Ranstrom	WordPerfect
Admin/Info Serv/Tele	ADISTC01	DSVHOST	Tony Herbert	WordPerfect
" "	ADISTC02	DSVHOST	Dennis Sheline	WordPerfect
" "	ADISTC03	DSVHOST	Carl Hotvedt	WordPerfect

<b>Admin/Info Serv/Tele</b>	ADISTC90	DSVHOST	Phyllis Ballenger	WordPerfect
<b>Admin/Prsnl</b>	ADPDAD01	DSVHOST	Laurie Ekanger	Displaywrite3
<b>Admin/Prsnl</b>	ADPDAD02	DSVHOST	Ginny Kalchbrenner	Displaywrite3
<b>Admin/Prsnl/Classif</b>	ADPDCB01	DSVHOST	John McEwen	WordPerfect
<b>Admin/Prsnl/Empl Rel</b>	ADPDER01	DSVHOST	Mark Cress	Displaywrite3
<b>Admin/Prsnl/Lab Rel</b>	ADPDLR01	DSVHOST	Rodney Sunsted	WordPerfect
<b>Admin/Prsnl/Word Proc</b>	ADPDWP01	DSVHOST	Bev Pickett	Displaywriter
<b>Admin/Publ. &amp; Graphics</b>	ADPGAD01	DSVHOST	Don Breiby	Displaywrite3
<b>Admin/Purchasing</b>	ADPUAD01	DSVHOST	Mike Muszkiewicz	Displaywrite3
<b>Admin/Tort Claims</b>	ADTCAD01	DSVHOST	John Maynard	Displaywrite3
<b>Governor's/OBPP</b>	GOOBPP01	DSVHOST	Terry Johnson	WordPerfect
<b>Highways/Billings</b>	HWBLGS	DSVHOST	Billings District	Displaywriter
" /Butte	HWBUTTE	DSVHOST	Butte District	"
" /GT. Falls	HWGFALL	DSVHOST	Great Falls District	"
" /Missoula	HWMSLA	DSVHOST	Missoula District	"
" /Glendive	HWGLNDV	DSVHOST	Glendive District	"
" /Helena	HWHLNA1	DSVHOST	Helena Headquarters	"
" "	HWHLNA2	DSVHOST	Helena Headquarters	"
" "	HWTHIRD	DSVHOST	Environmental Unit	WordPerfect
<b>Revenue/Director</b>	REDO080	LOCNAA	Debbie Hanna	DOSF
<b>Revenue/Data Process</b>	REDP051	LOCNAA	Sharon Beaver	DOSF
" "	REDP061	LOCNAA	Mike Zahn	DOSF
" "	REDPOP01	DSVHOST	Bill Gilleland	WordPerfect
" "	REDPOP02	DSVHOST	Mark Johnson	WordPerfect



## TRAINING

### Free Seminars

The following short seminars are free. Call Gale at 444-2974 to sign-up.

**May 22, 1987**

#### **Disk Management**

8:30 am to 10:30 am

How to allocate and authorize datasets with the Online Disk Management System.

1:30 pm to 3:30 pm

#### **SAS Online Applications**

Though SAS stands for Statistical Analysis System, it includes not only a complete programming language but an online facility as well. This demonstration will show how online SAS can be used to design screens for entering data in minutes. The screens may be used for survey data to be analyzed by the powerful statistical procedures of SAS, or as a quick prototyping tool for designing traditional online data processing systems.

**June 12, 1987**

#### **ISPF**

8:30 am to 10:30 am

Learn advanced editing commands and selected utilities. Shifts and bounds, overlays, excluding ranges, picture strings, text handling, and entry assist will be discussed. SDSF, catalog inquiry and management, and the move/copy utilities will also be covered.

\*\*\*\*\*  
 \* **UPCOMING CLASSES** \*  
 \*\*\*\*\*

**State Data Network Classes**

Apr 6 (a.m.) Using SDSF (free)  
 Apr 6 (p.m.) Basic Computer Concepts (free)  
 Apr 17 Basic Terminal Skills  
 Apr 21 (p.m.) Personal Services/PC  
 Apr 23 (p.m.) Personal Manager  
 May 11-15 Introduction to JCL  
 May 19 (p.m.) Personal Services/PC  
 May 21 (p.m.) Personal Manager

**Microcomputer Classes**

Apr 7, 8 Beginning Microcomputer Skills  
 Apr 9 Crosstalk XVI  
 Apr 10 Introduction to Displaywrite3  
 Apr 13 Micro Database Concepts and Design (Full - Next Class May 27th)  
 Apr 20-21 Introduction to WordPerfect (Full - Next Class May 7 and 8)  
 Apr 22-23 Introduction to Lotus 1-2-3 (Full - Next Class May 18 and 19th)  
 Apr 24 Spreadsheet Design and Documentation  
 May 4, 5 Beginning Microcomputer Skills  
 May 6 Fundamentals of DOS (Full - Next Class June 24)  
 May 7, 8 Introduction to WordPerfect  
 May 18, 19 Introduction to Lotus 1-2-3  
 May 20 Using the IBM Token Ring  
 May 21 Macro Feature of Lotus 1-2-3  
 May 27 Micro Database Concepts and Design  
 May 28-29 Beginning R:Base System V  
 Jun 4, 5 Beginning Microcomputer Skills  
 Jun 8, 9 Introduction to Lotus 1-2-3

## TRAINING SCHEDULE

### STATE DATA NETWORK CLASSES

USING PERSONAL SERVICES/PC (PS/PC): presented by Jeanette  
Rushford and Mel Liston of the  
Information Center

DATE: April 21, 1987  
May 19, 1987  
TIME: 1:00 pm to 4:30 pm  
PLACE: Room 25, Mitchell Building  
COST: \$35.00  
LIMIT: 10  
PREREQUISITE: Beginning Microcomputer Skills and  
experience with either WordPerfect or  
Displaywrite3

PS/PC allows you to electronically send and receive messages or files. A document created by either WordPerfect or Displaywrite3 can be distributed to any other person also using PS/PC by going through DISOSS on the state's mainframe. To use PS/PC you must have the Personal Services/PC software, the IBM PC 3270 Emulation Program and adapter, and a coaxial cable or phone line connecting your PC to the mainframe.

PERSONAL MANAGER (PM): presented by Teri Lundberg of the  
Information Center

DATE: April 23, 1987  
May 21, 1987  
TIME: 1:30 pm to 3:30 pm  
PLACE: Room 25, Mitchell Building  
COST: \$25.00  
LIMIT: 10  
PREREQUISITE: Beginning Microcomputer Skills or Basic  
Terminal Skills

Personal Manager is a calendaring product available to anyone who can establish a session with the mainframe. It is used for scheduling meetings (for yourself and others), reserving resources like conference rooms and even taking telephone messages.

BASIC TERMINAL SKILLS: presented by Wendy Wheeler of the  
Information Center

DATE: April 17, 1987  
TIME: 8:30 a.m. to 4:00 p.m.  
PLACE: Room 25, Mitchell Building  
COST: \$50.00  
LIMIT: 8  
PREREQUISITE: 3270nd (interactive class on terminal  
operation)

BASIC TERMINAL SKILLS is a hands-on workshop to provide experience using computer terminals and the SPF editor. The SPF editor is an easy-to-learn menu used to enter data and programs into the State of Montana central computer system. Entering data, changing data and submitting programs for execution are covered in detail. Also covered are SPF's utility functions and how to track job output.

This course is essential for state government personnel using terminals tied into the State of Montana central computer. This course is a prerequisite for many other ISD classes.

**INTRODUCTION TO JCL:** presented by Randy Holm and Gary Wulf of the Information Center

**DATE:** May 11 - May 15, 1987  
**TIME:** 8:30 am to 4:00 pm each day  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$150.00  
**LIMIT:** 8  
**PREREQUISITE:** Basic Terminal Skills (ISD12)

This course is designed for programmers, I/O controllers, operations technicians or users of report-writing software who submit jobs on ISD's system.

This course will cover:

- Syntax and coding of IBM Job Control Language (JCL)
- MVS operating system
- How to handle datasets and device assignments
- Some of the IBM utilities
- Troubleshooting and interpreting system messages
- Hands-on experience writing and executing JCL

## MICROCOMPUTER CLASSES

**BEGINNING MICROCOMPUTER SKILLS:** presented by the staff of the  
Information Center

**DATE:** (one day only) May 4, 1987  
May 5, 1987  
Jun 4, 1987  
Jun 5, 1987  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$50.00  
**LIMIT:** 10  
**PREREQUISITE:** None

This course will give participants brief hands-on experience with microcomputers. Topics to be covered:

- The machine
- The operating system
- Word processing
- Spreadsheets and graphics
- File management
- Communications

All class time will be spent using microcomputers and software. The participant will learn what microcomputers can do and how to approach them with a positive attitude. This course or its equivalent is a prerequisite for other microcomputer courses.

**USING THE IBM TOKEN RING NETWORK:** presented by Ron Heilman of  
the Information Center

**DATE:** May 20, 1987  
**TIME:** 8:30 am to 4:30 pm  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$50.00  
**LIMIT:** 10  
**PREREQUISITE:** Beginning Micro Skills and Token Ring user

This class is for those using the Token Ring to share access to programs, files and printers. The main topics to be covered are:

- Introduction to basic network concepts and terminology
- Advantages and disadvantages to networking
- What is a Token Ring Network and how does it work?
- How to perform common network tasks using the network menus  
(ex: messaging, cancelling print jobs, etc.)
- Simple problem and error determination
- Sharing files and programs with the network
- Some network management considerations

**NOTE:** This class is not intended for network system administrators or network programming staff. Contact Ron Heilman at 444-2924 if you have any questions.

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WORD PROCESSING CLASSES

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**INTRODUCTION TO WORDPERFECT:** presented by Melanie Liston of the Information Center

**DATE:** May 7 and 8, 1987  
**TIME:** 8:30 am to 3:30 pm on first day  
8:30 am to noon on second day  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$75.00  
**LIMIT:** 10  
**PREREQUISITE:** Beginning Microcomputer Skills

This course is intended for anyone interested in learning the basics of WordPerfect. This class will concentrate on text creation, use of function keys, editing, formatting, printing, filing, and retrieving documents. Merging documents, macro creation, block functions and use of the spell checker are also covered.

**INTRODUCTION TO DISPLAYWRITE 3:** presented by Gale Kramlick of the Information Center

**DATE:** April 10, 1987  
**TIME:** 8:30 am to 4:30 pm  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$50.00  
**LIMIT:** 10  
**PREREQUISITE:** Beginning Microcomputer Skills or equivalent

Displaywrite 3 is IBM's microcomputer word processing package. This course will introduce the professional to DW3's comprehensive menu structure, cover the basics of creating, revising, paginating and printing documents.

=====

SPREADSHEET CLASSES

=====

INTRODUCTION TO LOTUS 1-2-3: presented by Brett McAlister of the  
Information Center

DATE: May 18 and 19, 1987  
June 8 and 9, 1987  
TIME: 8:30 am to 3:30 pm on the first day  
8:30 am to 12:00 noon the second day  
PLACE: Room 25, Mitchell Building  
COST: \$75.00  
LIMIT: 10  
PREREQUISITE: Beginning Microcomputer Skills

This course is designed for anyone with little or no previous  
1-2-3 or microcomputing experience.

INTRODUCTION TO LOTUS 1-2-3 will concentrate on 1-2-3 spreadsheet  
creation and editing. Building formulas, using functions,  
formatting information, the 1-2-3 command structure and the  
creation of graphics is covered. Printing spreadsheets and  
graphs is also included. The more advanced features such as  
macro programming and database commands are covered in other  
classes.

Class format consists of lecture and hands-on practice followed  
by lab time on actual agency spreadsheets for further experience.

SPREADSHEET DESIGN AND DOCUMENTATION: presented by Ron Heilman  
of the Information Center

DATE: April 24, 1987  
TIME: 8:30 am to 4:30 pm  
PLACE: Room 25, Mitchell Building  
COST: \$50.00  
LIMIT: 10  
PREREQUISITE: Introduction to Lotus 1-2-3

This class will emphasize the importance, effectiveness and the  
organizational benefits of good spreadsheet design and documenta-  
tion. The Lotus 1-2-3 spreadsheet program will be used to  
demonstrate good and bad techniques. Some methods to track down  
common mistakes and logic problems will be covered.

Students should have previous spreadsheet experience. A general knowledge spreadsheet applications and concepts is required. Minimum requirements can be met by completing the "Introduction to Lotus 1-2-3" class. Students are not required to be 1-2-3 users, however, if this is the case, or if you are not sure if you meet the minimum requirements, please call Ron at 444-2924.

**MACRO FEATURE OF LOTUS 1-2-3:** presented by Brett McAlister of the Information Center

**DATE:** May 21, 1986  
**TIME:** 8:30 a.m. to Noon  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$35.00  
**LIMIT:** 10  
**PREREQUISITE:** Intro to Lotus or equivalent experience

The macro programming capabilities of 1-2-3 can help you automate 1-2-3 tasks, saving time and keystrokes. A macro is a sequence of keystrokes and commands stored in your worksheet for execution when desired.

This class is for 1-2-3 users who have no previous macro experience. Through lecture, video and hands-on practice, participants will learn to write and document timesaving macros.

=====

COMMUNICATIONS CLASS

=====

**CROSSTALK XVI:** presented by Ron Heilman of the Information Center

**DATE:** April 9, 1987  
**TIME:** 8:30 a.m. to 4:30 p.m.  
**PLACE:** Room 25, Mitchell Building  
**COST:** \$50.00  
**LIMIT:** 10  
**PREREQUISITE:** Beginning Microcomputer Skills

Crosstalk XVI is a microcomputer communications software package. This course is designed to familiarize the user with asynchronous communications using a microcomputer and this software. It explores what can and cannot be done and how it is done. It will also teach the user how to use and configure Crosstalk XVI for communicating with remote computers. Most features of Crosstalk XVI (with the major exception of the script file command language) will be covered.



=====

DATABASE CLASSES

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> > \* \* \* NEW CLASS \* \* \* < <

**MICRO DATABASE CONCEPTS AND DESIGN:** presented by Randy Holm of the Information Center

DATE: May 27, 1987  
TIME: 8:30 am to 4:30 pm  
PLACE: Room 25, Mitchell Building  
COST: \$50.00  
LIMIT: 10  
PREREQUISITE: Beginning Microcomputer Skills

This class is designed to give participants a primary understanding of what a relational database is and how it compares to other products like Lotus 1-2-3 and PFS:Professional File. The class teaches database design techniques and is a prerequisite for other database classes offered by the Information Center.

> > \* \* \* NEW CLASS \* \* \* < <

**BEGINNING R:BASE SYSTEM V:** presented by Randy Holm of the Information Center

DATE: May 28 and May 29, 1987  
TIME: 8:30 am to 4:30 pm each day  
PLACE: Room 25, Mitchell Building  
COST: \$100.00  
LIMIT: 10  
PREREQUISITE: Beginning Microcomputer Skills and Micro Database Concepts and Design

This class will give participants hands-on experience creating a database and developing a simple application with R:Base System V. The application will include database updates, queries, and simple forms and reports generation. "Prompt by Example" and "Express" will be used.

=====

COMPUTER BASED TRAINING

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The following free tutorials are available in the Computer Based Training Lab located in Room 24 of the Mitchell Building. The tutorials are either diskette or video-based. All are designed for individual study and self-pacing. Tutorials available in the CBT lab include:

- Using Displaywrite 3
- Disk Operating System (DOS)
- Intro to Lotus 1-2-3
- Macro Programming & Advanced Lotus 1-2-3
- Typing Instructor
- Teach Yourself WordPerfect

Call Gale in the Information Center at 444-2974 to reserve time in the lab or to check out the tutorials.

FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS CANCELLATIONS ARE MADE **THREE DAYS** BEFORE THE DATE FOR EACH CLASS.

ISD ENROLLMENT APPLICATION  
(FOR ALL COURSES)

PLEASE COMPLETE THE FOLLOWING APPLICATION AND RETURN  
TO INFORMATION SERVICES DIVISION

COURSE: \_\_\_\_\_

DATE: \_\_\_\_\_

STUDENT: \_\_\_\_\_

AGENCY/DIVISION: \_\_\_\_\_

MAILING ADDRESS: \_\_\_\_\_

PHONE: \_\_\_\_\_

ISD BILLING NUMBER: \_\_\_\_\_

SOC SEC NO (FOR P/P/P): \_\_\_\_\_

AUTHORIZED SIGNATURE: \_\_\_\_\_

HAVE YOU MET THE PREREQUISITES FOR THIS COURSE? PLEASE  
EXPLAIN GIVING JOB EXPERIENCE OR CLASS WHEN APPLICABLE

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\*\*\*\*\*  
700 copies of this public document were printed at a cost of  
\$350.00. Distribution costs are \$16.00  
Editor: Teri Lundberg  
\*\*\*\*\*

DEPARTMENT OF ADMINISTRATION  
INFORMATION SERVICES DIVISION  
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